

Notice of Allowability

Application No.

09/630,753

Examiner

William J. Allen

Applicant(s)

TAYLOR ET AL.

Art Unit

3625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the response filed 10/16/2006.
2. ☒ The allowed claim(s) is/are 41, 44, 45 and 49.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

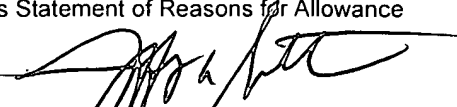
4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material

5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 20061219.
7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


JEFFREY A. SMITH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

DETAILED ACTION

Prosecution History Summary

Claims 21, 23-28, 41, and 43-53 were pending per Applicant's amendment filed October 17, 2005.

Claims 21, 23-28, and 51-53 have been withdrawn without traverse per applicant's response to election/restriction filed April 6, 2006.

Claims 21, 23-28, 41, 44-45, 49, and 51 were pending per applicant's amendment filed October 11, 2006.

Claims 21, 23-28, and 51 are canceled per this response as set forth below under Election/Restriction.

Claims 41, 44-45, and 49 are pending and hereby indicated allowable as set forth below under Allowable Subject Matter.

Election/Restrictions

This application is in condition for allowance except for the presence of claims 21, 23-28, and 51 directed to methods for extracting information from the Internet, non-elected without traverse. Accordingly, claims 21, 23-28, and 51 have been cancelled.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Warren Pate on December 18, 2006.

The Application has been amended as follows:

In the Title

The title has been amended to read as follows:



--Method for extracting information utilizing a-- has been added to appear before "user-context-based search engine".

In the Claims

1-40 (Canceled).

41. (Currently Amended) A method for extracting information from the internet, the method programmed in a computer readable-medium to be executed by a processor operably connected thereto, the method comprising:

mining to gather and organize information from the Internet to form a database having a hierarchical schema;

acquiring from a user a textual query comprising a collection of words each having multiple meanings depending on the context of use, at least one of which meanings is descriptive of information sought by the user;

deriving a micro-context comprising a plurality of words corresponding to the textual query ~~and comprising a plurality of words~~, each word of the plurality of words assigned a relative weighting derived from the patterns of occurrence thereof in web pages accessed by the user during the user's navigation through the Internet;

operating independently from the hierarchical schema to locate a subset of the information in the database, the subset corresponding to the micro-context; and

presenting the subset to the user.

42-43 (Canceled).

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44. (Currently Amended) The method of claim 41, wherein deriving a the micro-context further comprises assigning relative weighting to each word of the plurality of words based on prior Internet searches conducted by the user.

45. (Currently Amended) The method of claim 44, wherein deriving a the micro-context further comprises assigning a relative weighting to each word of the plurality of words based on results produced by prior Internet searches conducted by the user.

46-48 (Canceled).

49. (Currently Amended) The method of claim 41, wherein deriving a the micro-context further comprises assigning a relative weighting to each word of the plurality of words based on prior Internet searches conducted by the user.

50-53 (Canceled).

ALLOWABLE SUBJECT MATTER

1. The following is an examiner's statement of reasons for allowance:

Regarding claim 41, the prior art made of record neither anticipates nor fairly and reasonably teaches "deriving a micro-context comprising a plurality of words corresponding to the textual query, each word of the plurality of words assigned a relative weighting derived from the patterns of occurrence thereof in web pages accessed by the user during the user's navigation through the Internet."

Regarding claims 44-45 and 49, these claims depend from independent claim 41 and are allowable for at least the reasons above with regards to claim 41.

The most relevant prior art of record is Herz et al. (US 6754939). Herz teaches the customized identification of pertinent "target objects" such as news articles, purchasable items, movies, etc. in an electronic environment. More specifically, Herz uses a "target profile" for a target object that is derived based on the frequency of occurrence of each word in the target object versus its frequency of occurrence in all objects. Additionally, Herz teaches a "target profile interest summary" which describes the user's interest in various types of target objects (see at least: Herz, abstract, col. 5 lines 6-25). Herz also teaches where the profile of the user may be automatically and continually updated with information describing the user's interest and target profile characteristics. Attributes, such as pieces of text of various lengths, act as individual data that describe the target objects and constitute part of a target object's profile (see

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at least: col. 6 lines 1-60). Similarity and filtering systems allow matching of target objects to users, such as matching buyers and sellers. Object profiles (submitted by the seller) of goods sellers wish to sell are compared to buyer submitted object profiles of goods a buyer desires to purchase. The system of Herz computes the similarity of the submitted objects and uses this to match buyers and sellers (see at least: col. 17 lines 3-18). The filtering system of Herz uses active and/or passive feedback to assess a user's interest level in target objects and refine the knowledge of the user's interest, and assigns a "weight" or "value" to the object such as +2 if more than one minute was spent viewing a page or document (col. 17 line 20-col. 18 lines 18). Though Herz teaches refining the knowledge of a user's interest, a concept closely related to the development of a "micro-context", through use of active, passive, and a combination of active/passive feedback Herz does not anticipate or render obvious deriving a micro-context comprising a plurality of words, each word assigned a relative weighting derived from patterns of occurrence in web pages accessed by the user during the user's navigation through the Internet.

US Patents and PG-PUB

- **Herz et al. (US 5754939).** Herz teaches the above described system for customized identification of target objects in relation to user's interest. Herz, however, fails to anticipate or render the above mentioned limitations obvious.
- **Driscoll (US 5576954).** Driscoll teaches a system for determining the relevancy of text in order to enhance the retrieval of text documents by search queries. Driscoll further uses calculated weights, which are applied to determine a similarity coefficient. A sorted list according to the similarity coefficient is provided to the user. Driscoll, however, fails to anticipate or render the above mentioned limitations obvious.
- **Adi (US 4849898).** Adi teaches a search and retrieval system utilizing semantic letter analysis. Meaningful letters are assigned weights, which are then converted to numeric values representative of the concepts represented by the letters. Adi, however, fails to anticipate or render the above mentioned limitations obvious.
- **Turtle (US 5265065).** Turtle teaches a natural language searching system with comparative analysis. Words in the input query are broken down to there base roots and compared to a database of phrases to identify phrases in the search query. Turtle, however, fails to anticipate or render the above mentioned limitations obvious.

Foreign Patent Documents

- **PTO 892 reference N (EP 0 457 705).** PTO 892 N teaches a method for permitting contextual searching of data objects in a library facility, with a plurality of contextual search indices available for searching. PTO 892 N, however, fails to anticipate or render the above mentioned limitations obvious.
- **PTO 892 reference O (EP 0 380 239).** PTO 892 O teaches a text searching and retrieval system that builds an indexed representation of each word in stored files. The system searches requested words using the index and provides a ranking for the files retrieved based on the “strength of match”. PTO 892 O, however, fails to anticipate or render the above mentioned limitations obvious.

Non-Patent Literature

- **PTO 892 reference U.** PTO 892 U teaches Yoogli, an online search tool enabling meaning-based search technology. PTO 892 U, however, does not meet the priority date of the current application.
- **PTO 892 reference V.** PTO 892 V teaches Satyam Spark’s SearchPad, which enables simultaneous collaboration of more than 30 search engines as well as a filtering agent that enhances the accuracy of returned results. PTO 892 V, however, fails to anticipate or render the above mentioned limitations obvious.

- **PTO 892 reference W.** PTO 892 W also teaches the SearchPad system by Satyam Spark Solutions and further teaches where the SearchPad software can be “trained” by a user to produce more accurate results. PTO 892 W, however, fails to anticipate or render the above mentioned limitations obvious.
- **PTO 892 reference X.** PTO 892 X teaches a method for extracting frequent sequences in a set of documents, the frequent sequence being a sequence of words appears in a specified number of documents. Also, threshold values are used to provide a baseline for “frequency” of appearance. PTO 892 X, however, fails to anticipate or render the above mentioned limitations obvious.
- **PTO 892 reference Y.** PTO 892 Y teaches web search tools and includes discussion open text searching and multiple online search engines such as Lycos, Yahoo, and Worm. PTO 892 Y, however, fails to anticipate or render the above mentioned limitations obvious.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William J. Allen whose telephone number is (571) 272-1443. The examiner can normally be reached on 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff A. Smith can be reached on (571) 272-6763. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

William J. Allen
Patent Examiner
December 18, 2006


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